

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit: 2151

Examiner: Patel, Dhairya A,

Serial No.: 09/910,680

Filed: July 20, 2001

In re Application of: Schrempp et al.

For: PLAYLIST GENERATION METHOD AND APPARATUS

BRIEF ON APPEAL ON BEHALF OF APPELLANT UNDER 37 C.F.R. §41.37

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P.O. Box 1450

Alexandria, VA 22313-1450

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BRIEF ON APPEAL ON BEHALF OF APPELLANT

In support of the Notice of Appeal filed on appealing the Examiner's Final Rejection of each of claims 1-4, 6-29, 31-35, and 37-59 (All Pending Claims), that appear in the attached Appendix A, Appellants hereby provide the arguments in support of the appeal.

I. REAL PARTY IN INTEREST

The present application was assigned from the inventors, Schrempp, James B.; Ikezoye, Vance; Wold, Erling H.; Blum, Thomas; Keislar, Douglass F.; and Wheaton, James, to Audible Magic Corporation, Inc. on January 18, 2002. The Assignment was recorded by the U.S. Patent and Trademark Office on reel 012514 frame 0568 on January 31, 2002. Thus, the real party in interest is Audible Magic Corporation.

II. RELATED APPEALS AND INTERFERENCES

The undersigned, the Assignee and the Appellants do not know of any appeals or interferences which would directly affect or which would be directly affected by, or have a bearing on, the Board's decision in this Appeal.

III. STATUS OF THE CLAIMS

Claims 1-4, 6-29, 31-35, and 37-59 remain pending in this application. Claims 5, 30, and 36 have been canceled in previous responses by Appellants. Claims 1-4, 6-29, 31-35, and 37-59 (All pending claims) are reproduced in the attached Appendix A and are the claims on Appeal. Each of these claims is currently pending in the application.

IV. STATUS OF ANY AMENDMENTS FILED SUBSEQUENT TO THE FINAL REJECTION

Appellants have not filed any amendments in response to the Final Office Action. Thus, no amendments are pending.

V. SUMMARY OF THE INDEPENDENT CLAIM'S SUBJECT MATTER

Claim 1 relates to a system for identifying works from data broadcast over a connection to generate a playlist. Claim 1 includes at least one analysis module that is configured to receive

data of a work being broadcast over a connection. See page 6, line 15, line 10, line 13. The analysis module receives an arbitrary portion of data of an unidentified work. See, page, 17 lines 14-25. The arbitrary portion of data is then divided into segments. See page 18, line 12-page 19, line 14. The analysis module then generates fingerprints of the data. See page 9, line 12-page 10, line 14. The representation or fingerprint is then transmitted to an ID server that compares the representation to representations of known works and identifies the work being transmitted as work having a matching identification. See page 14, line 16- page 15, line 4.

Claim 31 relates to a method for automatically generating a playlist. The method begins by receiving, by at least one analysis module, data including an arbitrary portion of data of an unknown work. See page 17, lines 14-25. The analysis module generates a representation of the arbitrary portion of data of said unknown work. See page 9, line 12- page 10, line 14. The representation or fingerprint is then transmitted to an ID server that compares the representation to representations of known works and identifies the work being transmitted as work having a matching identification. See page 14, line 16- page 15, line 4.

Claim 51 recites a method for automatically generating a playlist that identifies a work in the following manner. First, a representation of data including an arbitrary portion of data of an unknown work over a network is received. See page 14, lines 16-25. The ID server then identifies the unknown work using the representation. See Page 14, line 16, page 15, line 4. The list is then updated with an identification of said representation. *Id.*

Claim 52 recites a system for automatically generating a playlist that includes the following components: means for receiving, means of identifying and means for updating. The means for receiving receives a representation of data including an arbitrary portion of data of an unknown work over a network is received. See page 14, lines 16-25. The means for identifying identifies the unknown work using the representation. See Page 14, line 16, page 15, line 4. The means for updating updates a playlist with an identification of said representation. *Id.*

Claim 59 recites a playlist generation system including means for receiving data, means for generating a representation of the data, means for sending the representation to an identification server, and means for sending an identification of the work to another computer system. The means for receiving receives data including an arbitrary portion of data of an unknown work. See, page, 17 lines 14-25. The means for generating generates a representation of said data including said arbitrary portion data of said unknown work. See page 9, line 12-page 10, line 14.

The means for sending said representation to at least one identification server over a network. See page 14, line 16- page 15, line 4. The means for sending an identification of said representation to at least one other computer system over said network. *Id.*

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Appellants seek the Board's review of the rejections of claims 1-4, 6-8, 11-13, 16-19, 22-23, 26, 31-34, 37-39, 42-44, 47-50, 52-55, 58 and 59 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,230,990 issued to Lert Jr. et al (Lert1).

Appellants also seek the Board's review of the rejections of claims 20-21 under 35 U.S.C. § 103(a) as being unpatentable over Lert1 in view of U.S. Patent No. 5,732,193 issued to Aberson et al. (Aberson).

Appellants also seek the Board's review of the rejections of claims 24, 25, 27, 28, 51, 56, and 57 under 35 U.S.C. § 103(a) as being unpatentable over Lert1 in view of U.S. Patent No. 6,026,439 issued to Chowdhury et al. (Chowdhury).

Furthermore, Appellant also seeks the Board's review of the rejections of claims 9, 10, 14, 15, 40, 41, 45, and 46 rejected under 35 U.S.C. §103(a) as being unpatentable over Lert1 in view of U.S. Patent Number 6,006,183 issued to Lai et al (Lai).

VII. GROUPING OF THE CLAIMS

There are two groups of claims. Group I includes claims 1 and 31 which are the independent claims pending in this application. Group II includes claims 2-4, 6-29, 32-35, and 37-59 which are all claims depending from claims 1 and 31. The claims in Group I are independent claims that recite similar subject matter and stand and/or fall on the same merits. The Group II claims are all claims depending from claims 1 and 31 that stand and/or fall on the same merits. For purposes of this discussion, claim 1 of Group I will be discussed. However, the arguments also apply to all claims in Group I. The allowability of the Group II claims stands and/or falls with the merits of the Group I claims.

VIII. ARGUMENTS

A. Group I claims

1. Rejection of Claim 1 under 35 U.S.C. §102(b) in view of Lert1

The Examiner rejects claim 1 under 35 U.S.C. § 102 (b) as being anticipated by U.S. Patent 4,230,990 issued to Lert Jr. et al. (Lert1). To anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), cert. denied, 484 U.S. 1007 (1988). Moreover, the single source must disclose all of the claimed elements “arranged as in the claim.” *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). The test for anticipation is symmetrical to the test for infringement and has been stated as: “That which would literally infringe [a claim] if later in time anticipates if earlier than the date of invention.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989); *Connell v. Sears Roebuck & Co.*, 722 F.2d 1542, 1548, 220 U.S.P.Q. 1931, 1938 (Fed. Cir. 1983). The Examiner has not provided a reference, Lert1, that teaches each and every limitation of claim 1.

Appellants’ specific contention is that Lert1 does not teach receiving an arbitrary portion of data. Specifically, the Examiner asserts that Lert1 teaches receiving an arbitrary portion of data using the arbitrary portion of data to determine the identity of a work. Appellants maintain that Lert1 does not show the use of an arbitrary portion of data because Lert1 searches for cue signals and then reads a certain amount of data after the cue signals are received. According to Webster’s Ninth New Collegiate Dictionary arbitrary is defined in definition 3b as “Existing or coming about seemingly at random or by chance...” Thus, an arbitrary portion of data is a random portion of data or data chosen by chance. In light of this definition, Appellants respectfully request that Board remove the rejection as Lert1 does not teach receiving an arbitrary portion of data as set forth in the arguments below.

Claim 1 recites receiving an arbitrary portion of data of a work, generating a representation of said work from said arbitrary portion of data and determining an identity of said work from said representation. Lert1 does not teach using an arbitrary portion of data of a work. Instead, Lert1 teaches using a known or specified portion of data from a work. Particularly, Lert1 teaches that a cue must first be received and then the data following the cue is used for feature extraction. Lert1 cannot work without the cue signals because then the system cannot select the

proper data used to get the representation of the program. In fact, the portion of Lert1 specifically cited by the Examiner clearly states in the following passage that a specific portion of data is needed by Lert1:

Whenever a network program is broadcast by a monitored broadcasting station 20, its broadcast signal will be received by field monitor 26, which continually examines this signal for the presence of cue signals. When a cue is detected, the field monitor 26 executes the same feature extraction process to derive a broadcast signature of unknown program identity. See Col. 10, lines 13-20.

From the text, it is clear that Lert1 needs data from a particular portion of a work to identify a detected work. Specifically, Lert1 requires the specific set of data following the cue signals. Claim 1, on the other hand, can use any portion of data from a work to detect the identity of the work from the use of signatures of overlapping segments of the known works. Thus, the arbitrary portion of the works recited in claim 1 is not taught by the method of using cue signals as taught by Lert1. Therefore, the Appellants respectfully request that the rejection of claim 1 be removed and claim 1 be allowed.

As claim 31 is a method of operating the system recited in claim 1, claim 31 is allowable for the same reasons set forth above. Thus, Appellants respectfully request that the rejection of claim 31 be removed and claim 31 be allowed.

B. Group II claims

1. Rejection of claims 20-21 Through 35 U.S.C. § 103(a) as being unpatentable over Lert1 in view of Aberson

Claims 20-21 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lert1 in view of Aberson. In order to maintain a rejection the Examiner has the burden of providing evidence of prima facie obviousness. See MPEP §2143. See also *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In order to prove prima facie obviousness, the Examiner must provide evidence in the prior art of a motivation to combine or modify a reference, a reasonable expectation of success, and a teaching of each and every claimed element. *Id.* The Examiner has failed to provide a teaching of each and every claimed element of the claims.

Claims 20-21 are dependent from claim 1. Thus, include all of the limitations of claim 1. As stated above, Lert1 does not teach the using an arbitrary portion of data. Thus, Lert1 does not teach this limitation in claims 20-21. Thus, the combination of references does not include a teaching of each and every limitation.

Furthermore, claims 20-21 depend from claim 1. Thus, claims 20-21 are allowable as dependent from an allowable base claim. For these reasons, Appellants respectfully request that the rejections of claims 20-21 be removed and claims 20-21 be allowed.

2. Rejection of claims 24, 25, 27, 28, 51, 56, and 57 under 35 U.S.C. § 103(a) as being unpatentable over Lert1 in view of Chowdhury

Claims 24, 25, 27, 28, 51, 56, and 57 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lert1 in view of Chowdhury. In order to maintain a rejection the Examiner has the burden of providing evidence of prima facie obviousness. See MPEP §2143. See also *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In order to prove prima facie obviousness, the Examiner must provide evidence in the prior art of a motivation to combine or modify a reference, a reasonable expectation of success, and a teaching of each and every claimed element. *Id.* The Examiner has failed to provide a teaching of each and every claimed element of the claims.

Claims 24, 25, 27, 28, 51, 56, and 57 are dependent from claims 1 and 31. Thus, include all of the limitations of claim 1 and 31. As stated above, Lert1 does not teach using an arbitrary portion of data. Thus, Lert1 does not teach this limitation in claims 24, 25, 27, 28, 51, 56, and 57. Thus, the combination of references does not include a teaching of each and every limitation.

Furthermore, claims 24, 25, 27, 28, 51, 56, and 57 depend from claim 1 or 31. Thus, claims 24, 25, 27, 28, 51, 56, and 57 are allowable as dependent from an allowable base claim. For these reasons Appellants respectfully request that the rejections of claims 24, 25, 27, 28, 51, 56, and 57 be removed and claims 24, 25, 27, 28, 51, 56, and 57 be allowed.

3. The rejections of claims 9, 10, 14, 15, 40, 41, 45, and 46 under 35

U.S.C. §103(a) as being unpatentable over Lert1 in view of Lai.

Claims 9, 10, 14, 15, 40, 41, 45, and 46 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lert1 in view of Lai. In order to maintain a rejection the Examiner has the burden of providing evidence of prima facie obviousness. See MPEP §2143. See also *In Re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In order to prove prima facie obviousness, the Examiner must provide evidence in the prior art of a motivation to combine or modify a reference, a reasonable expectation of success, and a teaching of each and every claimed element. *Id.* The Examiner has failed to provide a teaching of each and every claimed element of the claims.

Claims 9, 10, 14, 15, 40, 41, 45, and 46 are dependent from claims 1 and 31. Thus, include all of the limitations of claim 1 and 31. As stated above, Lert1 does not teach using an arbitrary portion of data. Thus, Lert1 does not teach this limitation in claims 9, 10, 14, 15, 40, 41, 45, and 46. Thus, the combination of references does not include a teaching of each and every limitation.

Furthermore, claims 9, 10, 14, 15, 40, 41, 45, and 46 depend from claim 1 and 31. Thus, claims 9, 10, 14, 15, 40, 41, 45, and 46 are allowable as dependent from an allowable base claim. For these reasons Appellants respectfully request that the rejections of claims 9, 10, 14, 15, 40, 41, 45, and 46 be removed and claims 9, 10, 14, 15, 40, 41, 45, and 46 be allowed.

IX. CONCLUSION

Appellants respectfully request the Honorable Board of Patent Appeals and Interferences to reverse the Examiner's rejection of the Group I claims under 35 U.S.C. §102 (b). Appellants also respectfully request the Honorable Board of Patent Appeals and Interferences to reverse the Examiner's obviousness rejection of the Group II claims under 35 U.S.C. § 103 (a).

Appellants respectfully submit that the prior art does not teach or suggest receiving an arbitrary portion of data as recited in the pending claims.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Kenneth D'Alessandro, Reg. No. 29,144, at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 50-0612 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,
SIERRA PATENT GROUP, LTD:

By: /kenneth d'alessandro/
Kenneth D'Alessandro, Reg. No. 29,144
(775) 586-9500

Please address all correspondence to:

Sierra Patent Group, Ltd.
1657 Hwy. 395, Suite 202
Minden, Nevada 89423
(775) 586-9500
(775) 586-9550

X. CLAIMS APPENDIX

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Previously Presented) A playlist generation system comprising:
 - at least one analysis module for receiving signals that include data wherein said data includes an arbitrary portion of data of an unknown work,
 - analyzing said data, generating a representation of said data including said arbitrary portion of data of said unknown work, and transmitting said representation over a network to an identification server;
 - at least one identification (ID) server for receiving said representation over said network from said at least one analysis module and determining the identity of said unknown work from said representation.
2. (Previously Presented) The system of claim 1, wherein said at least one analysis module further includes an input port configured to receive said signals from a networked source.
3. (Previously Presented) The system of claim 1, wherein said at least one analysis module further includes an input port configured to receive said signals from a broadcast source.
4. (Previously Presented) The system of claim 1, wherein said at least one analysis module further includes an input port configured to receive said data in the form of a pre-broadcast digital form.
5. (Cancelled)
6. (Previously Presented) The system of claim 1, wherein said network comprises the Internet.

7. (Previously Presented) The system of claim 1, wherein said representation comprises feature vectors.

8. (Previously Presented) The system of claim 1, wherein said representation comprises a spectral representation of said data.

9. (Previously Presented) The system of claim 1, wherein said representation comprises the text output of a speech recognition system.

10. (Previously Presented) The system of claim 1, wherein said representation comprises the musical score output of a music transcription system.

11. (Previously Presented) The system of claim 1, wherein said representation comprises a bit calculated key.

12. (Original) The system of claim 1, wherein said ID server is configured to identify said unknown work using feature vectors.

13. (Previously Presented) The system of claim 1, wherein said representation includes a spectral representation of said ID server is configured to identify said unknown work using said spectral representation of said unknown work.

14. (Original) The system of claim 1, wherein said ID server is configured to identify said unknown work using the text output of a speech recognition system.

15. (Original) The system of claim 1, wherein said ID server is configured to identify said unknown work using the musical score output of a music transcription system.

16. (Original) The system of claim 1, wherein said ID server is configured to identify said unknown work using a bit calculated key.

17. (Original) The system of claim 1, wherein said at least one analysis modules are further configured to receive a plurality of streaming sources for analysis at a single location.

18. (Original) The system of claim 1, wherein said at least one analysis modules are further configured to receive a plurality of streaming sources for analysis at a plurality of different access points of the network.

19. (Original) The system of claim 1, wherein said at least one analysis module is configured to provide said representations to said at least one ID server at a predetermined time interval.

20. (Original) The system of claim 19, wherein said predetermined time interval comprises at least once a day.

21. (Original) The system of claim 19, wherein said predetermined time interval comprises approximately once an hour.

22. (Previously Presented) The system of claim 19, wherein said at least one analysis module is configured to provide said representation to said at least one ID server responsive to receiving said signals and generating said representation.

23. (Previously Presented) The system of claim 19, wherein said at least one analysis module is configured to provide said representation to said at least one ID server based on an out-of-band event.

24. (Previously Presented) The system of claim 1, wherein said ID server is further configured to generate a playlist of identified works including said identification of said unknown work determined from said representation.

25. (Previously Presented) The system of claim 1, wherein said ID server is further configured to generate a playlist of identified works of each said representation received from each at least one analysis module connected to the network responsive to identification of each said unknown work from each said representation.

26. (Previously Presented) The system of claim 1, wherein said at least one ID server is further configured to provide an identification of said unknown work back to said at least one analysis module that transmitted said representation.

27. (Previously Presented) The system of claim 18, wherein said ID server is further configured to update a playlist of identified works with an identification of said work of said representation responsive to identifying a representation.

28. (Previously Presented) The system of claim 27, wherein said at least one ID server is further configured to provide an identification of said unknown work back to said at least one analysis module that transmitted said representation responsive to identification of said unknown work from said representation.

29. (Previously Presented) The system of claim 27, wherein said at least one analysis module is further configured to purge said representation responsive to said identification is received.

30. (Cancelled)

31. (Previously Presented) A method for automatically generating a playlist comprising:

receiving, by at least one analysis module, data including an arbitrary portion of data of an unknown work;

generating, by said at least one analysis module, a representation of said data including said arbitrary portion of data of said unknown work; and

sending, by said at least one analysis module, said representation to at least one identification server over a network.

32. (Original) The method of claim 31, further comprising the act of identifying, by said identification server, said unknown work based upon said representation.

33. (Original) The method of claim 32, further comprising the act of storing said identification in a playlist database.

34. (Original) The method of claim 32, further comprising the act of sending, by said identification server, said identification to said at least one analysis module.

35. (Original) The method of claim 34, further comprising the act of purging, by said at least one analysis module, at least one file corresponding stored to said identification.

36. (Cancelled)

37. (Previously Presented) The method of claim 31, wherein said network is the Internet.

38. (Previously Presented) The method of claim 31, wherein said act of generating said representation comprises generating feature vectors of said data.

39. (Previously Presented) The method of claim 31, wherein said act of generating said representation comprises a spectral representation of said data.

40. (Previously Presented) The method of claim 31, wherein said act of generating said representation comprises the text output of said unknown work from a speech recognition system.

41. (Original) The method of claim 31, wherein said representation comprises musical score output of a music transcription system.

42. (Previously Presented) The method of claim 31, wherein said representation comprises a bit calculated key of the unknown work.

43. (Previously Presented) The method of claim 32, wherein said act of identifying is performed using feature vectors in said representation.

44. (Previously Presented) The method of claim 32, wherein said act of identifying is performed using a spectral representation of said data.

45. (Previously Presented) The method of claim 32, wherein said act of identifying is performed using the text output of said data from a speech recognition system.

46. (Original) The method of claim 32, wherein said act of identifying is performed using the musical score output of a music transcription system.

47. (Previously Presented) The method of claim 31, wherein said act of identifying is performed using a bit calculated key of the data.

48. (Previously Presented) The method of claim 31, wherein said act of receiving, by at least one analysis module, data includes receiving a plurality of streaming sources for analysis at a single location.

49. (Previously Presented) The method of claim 31, wherein said act of receiving, by at least one analysis module, said data includes receiving a plurality of streaming sources for analysis at different access points of the network.

50. (Previously Presented) The method of claim 31, wherein said act of sending, by said at least one analysis module, said representation to at least one identification server is performed responsive to generating said representation.

51. (Previously Presented) A method for automatically generating a playlist comprising:

receiving a representation of data including an arbitrary portion of data of an unknown work over a network;
identifying said unknown work using said representation; and
updating a playlist with an identification of said representation.

52. (Previously Presented) A playlist generation system comprising:
means for receiving data including an arbitrary portion of data for an unknown work over a network;

means for generating a representation of data including said arbitrary portion data of said unknown work; and

means for sending said representation to at least one identification server over a network.

53. (Previously Presented) The system of claim 52, further including means for identifying said unknown work based upon said representation in said at least one identification server.

54. (Original) The system of claim 53, further including means for storing said identification in a playlist database.

55. (Previously Presented) The system of claim 54, further including means for sending said identification from said at least one identification server to said at least one analysis module over said network.

56. (Previously Presented) The system of claim 52, further including means for generate a playlist of identified works from each said representation received from each said at least

one analysis module in the network responsive to identification of a work from each said representation.

57. (Previously Presented) The system of claim 52, further including means for updating a playlist of identified works responsive to identification of a work from each said representation.

58. (Previously Presented) The system of claim 52, further including means for providing an identification of said unknown work back to the at least one analysis module responsive to identification of said work from said representation.

59. (Previously Presented) A playlist generation system comprising:
means for receiving data including an arbitrary portion of data of an unknown work;
means for generating a representation of said data including said arbitrary portion data of said unknown work;
means for sending said representation to at least one identification server over a network; and
means for sending an identification of said representation to at least one other computer system over said network.

XI. EVIDENCE APPENDIX

Not Applicable

XII. RELATED PROCEEDINGS APPENDIX

Not Applicable. There are no related proceedings.